IN THE U.S. PATENT AND TRADEMARK OFFICE,

INTERNATIONAL PRELIMINARY EXAMINATION AUTHORITY

In re PCT Patent Application of:

APPLICANT:	Nokia Corporation
INTERNATIONAL APPLICATION NO.:	PCT/IB03/02523
INTERNATIONAL FILING DATE:	27 June 2003
PRIORITY DATE:	10 June 2003
AUTHORIZED OFFICER:	William Trost
ATTORNEY'S DOCKET NO.:	873.0121.U1(WO)
TITLE:	METHOD AND APPARATUS FOR SWITCHING MOBILE STATION BETWEEN AUTONOMOUS AND SCHEDULED TRANSMISSIONS

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Attn: IPEA/US

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313

RESPONSE TO WRITTEN OPINION – ARTICLE 34 AMENDMENT

Sir:

This paper is herewith filed in response to the Patent Office's Written Opinion mailed on August 29, 2005, for the above-captioned PCT Patent Application, for which a two month response deadline has been set. No fees are believed due. However, should the undersigned attorney be mistaken, please consider this a petition for any extension of time that may be required to maintain the pendency of this Patent Application, and charge deposit account no.: 50-1924 for any required fee deficiency.

Please amend the application as shown below.

REMARKS

Claims 1-30 are pending. Claim 30 has been amended to change its dependency to claim 29 (from being dependent upon itself – an obvious error). Replacement page 21 is hereby presented. It is respectfully submitted that no new matter has been added.

Applicant appreciates the Patent Office's indication that claims 5-9, 14-18, and 20-30 are novel and have an inventive step. However, applicant believes that all claims are novel and have an inventive step.

The Patent Office (paragraph V.2) asserted "Claims 1-4, 10-13 and 19 lack novelty and inventive step under PCT Article 33(2) and 33(3) as being anticipated by Kadaba."

Claim 1 recites "A method for operating a mobile station with a base station, comprising when the mobile station is in an Autonomous mode of operation, autonomously transmitting data from the mobile station to the base station on a reverse access channel or reverse supplemental channel; in response to receiving **an acknowledgment indication from the base station, that comprises a reverse channel assignment message for the mobile station**, switching the mobile station to a Scheduled mode of operation; and transmitting data from the mobile station on **an assigned reverse channel**.

Claim 10 recites "A mobile station, comprising an RF transceiver for conducting bidirectional wireless communications with a base station; and a data processor operating under the control of a stored program for, when the mobile station is in an Autonomous mode of operation, autonomously transmitting from the mobile station to the base station on one of a reverse access channel and a reverse supplemental channel, said data processor being responsive to a reception of **an acknowledgment indication from the base station, that comprises a reverse channel assignment message for the mobile station**, for switching the mobile station to a Scheduled mode of operation and for transmitting data from the mobile station on **an assigned reverse channel**."

The Patent Office asserted (Paragraph V.2) "Regarding claim 1 Kadaba teaches a method for operating a mobile station with a base station, comprising: wherein the mobile station is in an Autonomous mode of operation, autonomously transmitting data from the mobile station to the base station on a reverse access channel or reverse supplemental channel (see pgs. 1 & 2, paragraphs [0024] and [0025]). Kadaba teaches in response to receiving an acknowledgment indication from the base station, that comprises a reverse channel assignment message for the

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mobile station, switching the mobile station to a Scheduled mode of operation; and transmitting data from the mobile station on an assigned reverse channel (see pg. 3, paragraph [0027] and pg. 5, paragraphs [0051] & [0052])."

Kadaba discloses a multiple mode data communication system allowing a wireless unit to be scheduled and/ or transmit autonomously over the reverse link data channel or supplemental channel (R-SCH) and a centralized approach to supplemental channel assignment at the base station (paragraph 0024). Kadaba also discloses the wireless unit may be allowed to transmit autonomously or allowed to transmit autonomously under base station supervision (paragraph 0025). Kadaba discloses on the reverse link, the Reverse Request Update Channel (R-RUCH) reports the current status of the wireless unit's buffers (paragraph 0027). In Kadaba, the bit indicator field specifies the wireless unit buffer size in multiples of blocks of bits, such as multiples of 768 bits. All zeroes indicate an empty buffer, and all ones is a 384 bit buffer size indicator which corresponds to the smallest buffer size in an embodiment of Kadaba. Kadaba discloses "As such, when the wireless unit wants to schedule the transmission of its data buffer, the wireless unit sends the buffer size, and all zeroes are sent when the wireless unit is done or if the wireless unit wants to go to autonomous data transmission" (paragraph 0027). Kadaba discloses using R-RUCH and R-PRCH to transmit buffer status and implied path loss to the base station (paragraph 0051). If the wireless unit switches from scheduling mode to autonomous mode, the wireless unit sends data on R-SCH (paragraph 0052).

Claims 1 and 10 recite "**an acknowledgment indication from the base station, that comprises a reverse channel assignment message for the mobile station.**" A reverse channel assignment message is included in an acknowledgment indication from the base station. Kadaba does not disclose or suggest this limitation. Reverse channel assignment does not appear to be done through an acknowledgment indication from the base station especially since Kadaba appears to constrain scheduling change requests from the wireless unit through the R-RUCH (paragraphs 0075, 0069 – last three lines). According to Kadaba, an autonomous wireless unit can request a switch to scheduled transmission at any time by transmitting current buffer status on the R-RUCH (paragraph 0088, lines 17-20). Thus, claims 1 and 10 are novel and have inventive steps. Furthermore, claims 2-4, 11-13, and 19 are novel and have inventive steps because they depend from claims 1 or 10.

Claim 2 recites "where **transmitting from the mobile station** to the base station to

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initiate the data transmission **comprises transmitting a Supplemental Channel Request Message.**"

Claim 11 recites "where **when transmitting from the mobile station** to the base station to initiate the data transmission the data processor transmits **a Supplemental Channel Request Message.**"

The Patent Office assert (paragraph V.2) "Regarding claim 2 Kadaba teaches transmitting from the mobile station to the base station to initiate the data transmission comprises transmitting a Supplemental Channel Request Message (see pg. 2, paragraph [0024] and pg. 3, paragraph [0029])."

Kadaba (paragraph 0024) discloses the reverse link channel is a supplemental channel (R-SCH) and (paragraph 0029) the reverse pilot reference channel (R-PRCH) reports the wireless unit pilot strength to the base station to enable the base station to calculate the instantaneous path loss to the wireless unit, but does not seem to disclose or suggest a supplemental channel request message. Thus, claims 2 and 11 are novel and have inventive steps for this additional reason. And, claims 4 and 13 are novel and have inventive steps additionally from claims 2 and 11 from which they depend, respectively.

Claims 4 and 13 each recite "where the acknowledgment indication comprises a Supplemental Channel Assignment Message."

The Patent Office (paragraph V.2) asserted "Regarding claim 4 Kadaba teaches an acknowledgement indication that comprises a Supplemental Channel Assignment Message (see pg. 2, paragraph [0024] and pg. 3, paragraph [0027])."
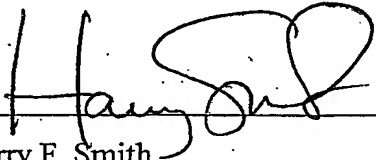
Kadaba discloses (paragraph 0024) "the reverse link channel is a supplemental channel (R-SCH)" and "The supplemental channel is formed by using an RF carrier and the designated Walsh code(s), whereby a wireless unit transmits on the supplemental channel using a long code to distinguish from other wireless units." Kadaba also discloses (paragraph 0027) "On the reverse link, the Reverse Request Update Channel (R-RUCH) reports the current status of the wireless unit's buffers." Kadaba does not seem to disclose or suggest a Supplemental Channel Assignment Message. Thus, claims 4 and 13 are novel and inventive for this additional reason.
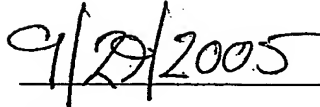
The Patent Office is respectfully requested to reconsider and remove the rejections of the claims 1-4, 10-13, and 19, as lacking novelty and lacking an inventive step. An early notification of the novelty and inventive step of claims 1-30 is earnestly solicited.

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Respectfully submitted:

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